

Amendments to the Claims

Please amend the claims as shown.

1 – 19 (canceled)

20. (currently amended) A burner, comprising:

a means for providing a flow of compressed air and/or oxygen in a flow direction;  
a fuel that is supplied to the burner and flows in a flow direction; and  
a means for creating a mixture comprising a concentration distribution of the fuel in the  
compressed air and/or oxygen in a plane an axis perpendicular to the flow direction, wherein the  
concentration distribution is not constant across the axis in order to avoid combustion  
instabilities during operation of the burner; and

a means for imparting a swirl of the mixture about the flow direction, wherein an outflow  
angle of the swirled mixture varies in magnitude in a single direction across the axis  
perpendicular to the flow direction.

21. (previously presented) The burner according to claim 20, wherein the burner has a burner longitudinal axis, a radial direction disposed perpendicularly to the burner longitudinal axis and the concentration distribution of the fuel varies in the radial direction.

22. (currently amended) The burner according to claim 21, wherein the burner has a burner longitudinal axis that represents thean interior area of the burner, and the concentration distribution of the fuel decreases from anthe interior to an exterior.

23. (currently amended) The burner according to claim 20, wherein the fuel can be supplied in a channel and the compressed air and/or oxygen can be supplied into the channel.

24. (previously presented) The burner according to claim 20, wherein the fuel, air, or oxygen is supplied to a channel, and the channel is embodied annularly around the burner longitudinal axis.

25. (previously presented) The burner according to claim 24, wherein a fuel-gas mixture flows in the channel.

26. (previously presented) The burner according to claim 20, wherein the burner is a gas turbine burner.

27. (previously presented) The burner according to claim 20, wherein the burner has a diffusion or pilot burner.

28. (previously presented) The burner according to claim 20, wherein the burner is a premix burner.

29. (previously presented) The burner according to claim 20, wherein the burner has a channel and a swirl blade disposed in the channel.

30. (previously presented) The burner according to claim 29, wherein the fuel is supplied to the channel via a fuel nozzle in the swirl blade.

31. (previously presented) The burner according to claim 30, wherein the swirl blade has fuel nozzles with diameters that vary and produce the non-constant concentration distribution of the fuel.

32. (currently amended) The burner according to claim 31, wherein the burner has a burner longitudinal axis that represents the an interior area of the burner and the burner has a radial direction disposed perpendicularly to the burner longitudinal axis, and the diameter of the fuel nozzles of an installed swirl blade decreases in the radial direction from the interior to the an exterior.

33. (currently amended) A burner, comprising:

a means for providing a flow of compressed air and/or oxygen in a flow direction;  
air and/or oxygen supplied to the burner and flows in a flow direction; and  
a means for imparting a swirl of the flow about the flow direction, wherein an outflow  
angle of the swirled flow varies in magnitude in a single direction across an axis perpendicular to  
the flow direction, a distribution of the air and/or oxygen of an outflow angle in a plane  
perpendicular to the flow direction, wherein the distribution of the outflow angle is not constant  
in order to avoid combustion instabilities during operation of the burner.

34. (currently amended) The burner according to claim 33, wherein the compressed  
air and/or oxygen is supplied in a channel, and a fuel is supplied to the channel.

35. (previously presented) The burner according to claim 33, wherein the burner has a  
burner longitudinal axis and the fuel, air, or oxygen can be supplied to a channel and the channel  
is embodied annularly around the burner longitudinal axis.

36. (currently amended) The burner according to claim 33, wherein the burner has a  
burner longitudinal axis, the burner has a radial direction disposed perpendicularly to the burner  
longitudinal axis, the burner has a channel in which a medium flows, and the flowing medium  
has an outflow angle between its flow direction and a plane an axis perpendicular to the burner  
longitudinal axis and the angle varies in along the radial direction.

37. (previously presented) The burner according to claim 36, wherein the burner has  
an interior area and the outflow angle decreases in the radial direction from an interior to an  
exterior.

38. (currently amended) The burner according to claim 33, wherein the burner has a swirl blade, the swirl blade having a bladed disk which is wound around a winding axis such that the gas-flow flowing past the swirl blade in the flow direction along an edge of the bladed disk forms an intersecting angle not equal to zero with the flow direction and the flow flowing past the swirl blade has different outflow angles, wherein the outflow angle varies in magnitude in a single direction across an axis perpendicular to the flow direction.

39. (currently amended) The burner according to claim 38, wherein the burner has a radial direction disposed perpendicularly to the burner longitudinal axis and the outflow angle of a the flow flowing past a swirl blade in the radial direction has different outflow angles at the swirl blade with the outflow angle decreasing in the radial direction from the interior to the exterior.